

Scientific Note:

Illustrated Notes on the Entomological Trips to various Provinces of East Turkey - II. Kop Dağı and Vauk Dağı (Erzurum and Gümüşhane Provinces)

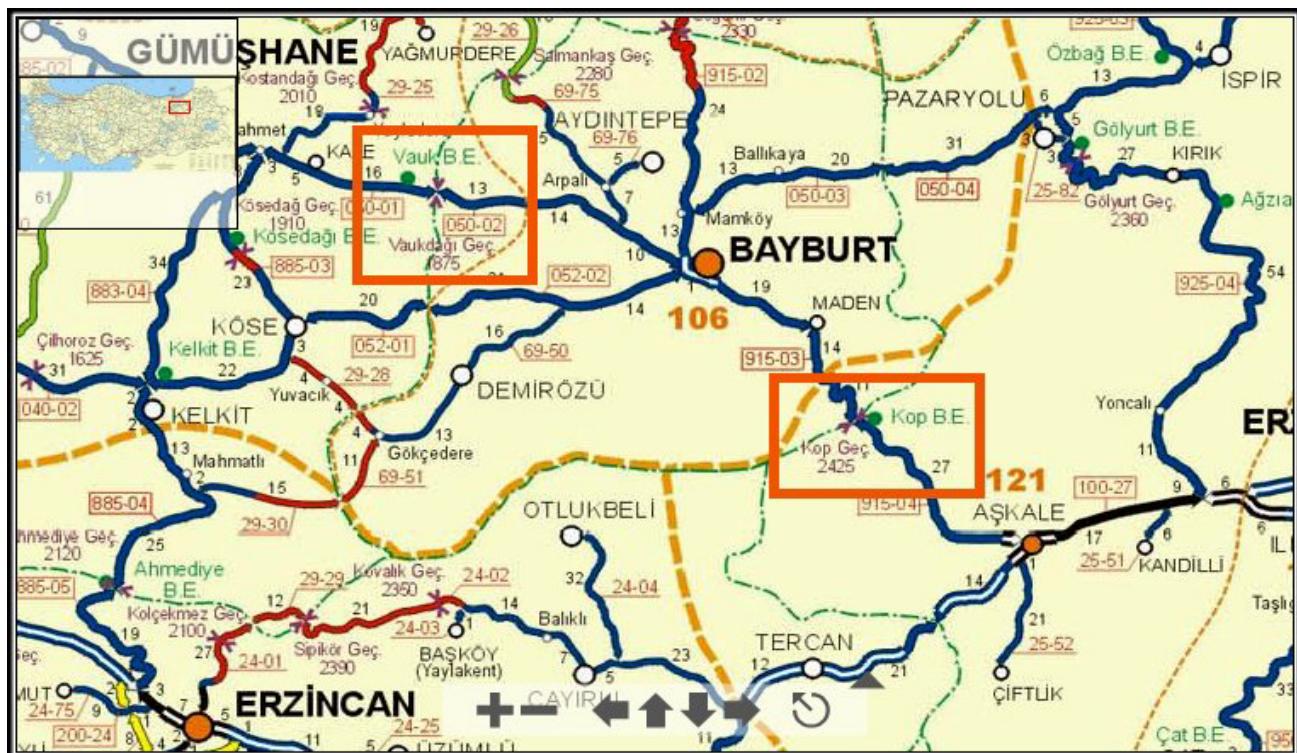
Muhabbet Kemal Ahmet Ömer Koçak

During the recent entomological trip made by the authors on 23rd June, 2008¹, the Kop Dağı Pass (Aşkale, Erzurum Province) and Vauk Dağı Pass (Gümüşhane Province), were partly evaluated from entomological stand point. The photographs² and video records were taken by the first author for the archive of the Cesa. All the specimens collected by the authors are preserved in the Cesa Collection. Collecting information will be published separately.

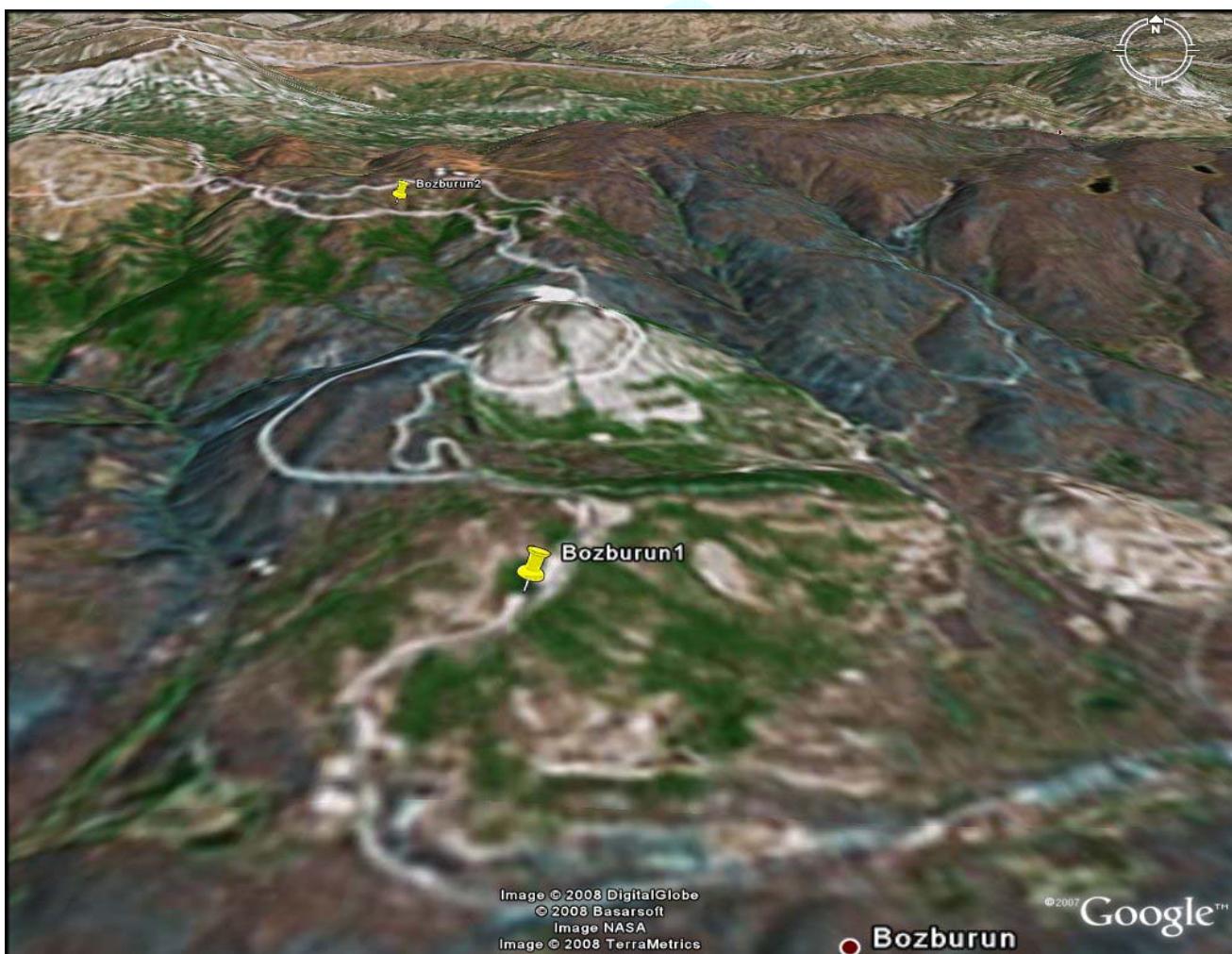
In this part of the series, the diurnal lepidopteran species, as well as some other insect groups, inhabiting in the Kop Dağı Pass in the District of Aşkale (Erzurum Prov.), and in the Vauk Dağı Pass (Gümüşhane Prov.) were studied by the authors (**Map 1**). In the morning hours, two different localities on the South-East slopes of the Kop Dağı Pass were selected. First locality [Bozburun1] was an opening of Oak woodland at 1960m (**Fig.1**), above Bozburun village, and the second one [Bozburun2] is a degraded grassland with scarce *Rosa* bushes and higher at an elevation of 2330m (**Map 2**) (**Fig.2**).

¹ Previous article of this series: Kemal, M. & A.Ö. Koçak, 2008, Illustrated Notes on the Entomological Trips to various Provinces of East Turkey I. Tahir Pass (Ağrı Province). Cesa News 24: 1-12, 1 map, 20 figs.

² During last trip, more than 2843 images were taken by the first author for the Cesa Archive. Total digital images of insects, other animals, and plants taken by the authors from Turkey and abroad, preserved in the Cesa Archive, is more than 83100.



Map 1 – Kop Pass and Vauk Pass (marked by orange rectangles]. From <http://www.turkiyeharitasi.com/>



Map 2 – Studied localities in the South-East of Kop Pass (Bozburun 1 & 2) (marked) [from Google Earth].



Fig. 1 – Habitat of Bozburun 1 (Kop Dağı), at 1960m. 23 June 2008, photo M.Kemal (Cesa)



Fig. 2 – Habitat of Bozburun 2 (Kop Dağı), at 2330m. 23 June 2008, photo M.Kemal (Cesa)

A checklist on the Lepidoptera fauna of Erzurum Province was published by the authors recently.³ Totally 777 species were listed in this article.⁴ Lepidoptera fauna of the Aşkale District will be evaluated in a separate article. In the present paper, some species of diurnal Lepidoptera and other insects are illustrated with faunal and biological notes.

Illustrations of the Insects found at Bozburun Localities (1 & 2) in the Aşkale District

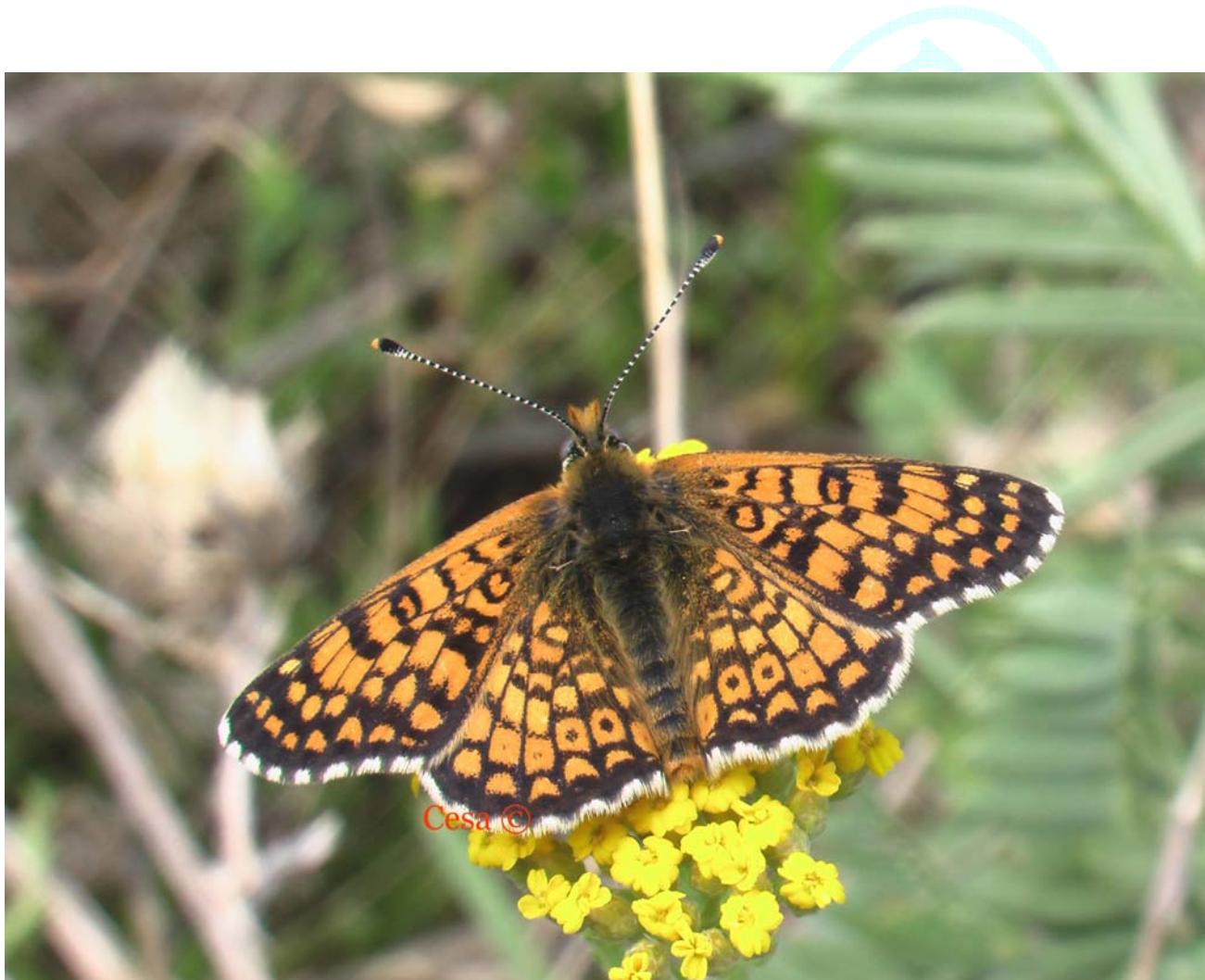


Fig.3- A feeding male of *Melitaea cinxia* (Argynnidae). Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa).

³Koçak,A.Ö. & M.Kemal, 2007, Synonymical and distributional list of the species of Erzurum Province (North East Turkey) (Lepidoptera). Cent. ent. Stud., Misc. Pap. 117/119: 1-20 [date of publication 20.01.2007].

⁴ Total number of the species of the Lepidoptera known from Erzurum Province is 790 [Cesa Infos-System, stand 6th July, 2008].



Fig.4- A basking female of *Melitaea cinxia* (Argynnidae). Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.5- A feeding male of *Melitaea didyma* (Argynnidae). Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.6- A pair in copula of *Eurodryas aurinia* (Argynnidae). Erzurum Prov., Aşkale, Bozburun 2330m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.7- A resting male of *Coenonympha leander* (Satyridae). Erzurum Prov., Aşkale, Bozburun 2330m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.8- A feeding male of *Polyommatus (Plebicula) amandus* (*Lycaenidae*). Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.9- A pair in copula of *Polyommatus (Neolysandra) coelestinus* (*Lycaenidae*). Erzurum Prov., Aşkale, Bozburun 2330m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.10- A resting male of *Plebejus (s.str.) argus* (*Lycaenidae*). Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.11- A resting male of *Lycaena (Thersamonia) thersamon* (*Lycaenidae*). Erzurum Prov., Aşkale, Bozburun 2330m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.12- A resting male of *Aporia crataegi* (Pieridae). Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.13- A resting male of *Parnassius mnemosyne* (Papilionidae). Erzurum Prov., Aşkale, Bozburun 2330m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.14- A caterpillar of *Malacosoma neustria* (Lasiocampidae) on *Quercus* tree. Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.15- A pair in copula of *Palomena prasina* (Pentatomidae, Hemiptera) on *Quercus* tree. Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.16- A male of *Isophya bicarinata* (Tettigoniidae, Orthoptera) on *Quercus* tree. Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa) [pers. comm. by M.Ünal for identification of the grasshopper]



Fig.17- A female of *Isophya bicarinata* (Tettigoniidae, Orthoptera) on *Silene* (Caryophyllaceae). Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa) [pers. comm. by M.Ünal for identification of the grasshopper]



Fig.18- A female of *Pamphagid* species (*Orthoptera*). Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.19- A male of *Pamphagid* species (*Orthoptera*). Erzurum Prov., Aşkale, Bozburun 1960m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.20- *Paeonia* species on the slopes (Paeoniaceae). Erzurum Prov., Aşkale, Bozburun 2330m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.21- *Paeonia* species on the slopes (Paeoniaceae). Erzurum Prov., Aşkale, Bozburun 2330m, 23 June, 2008, photo M.Kemal (Cesa).

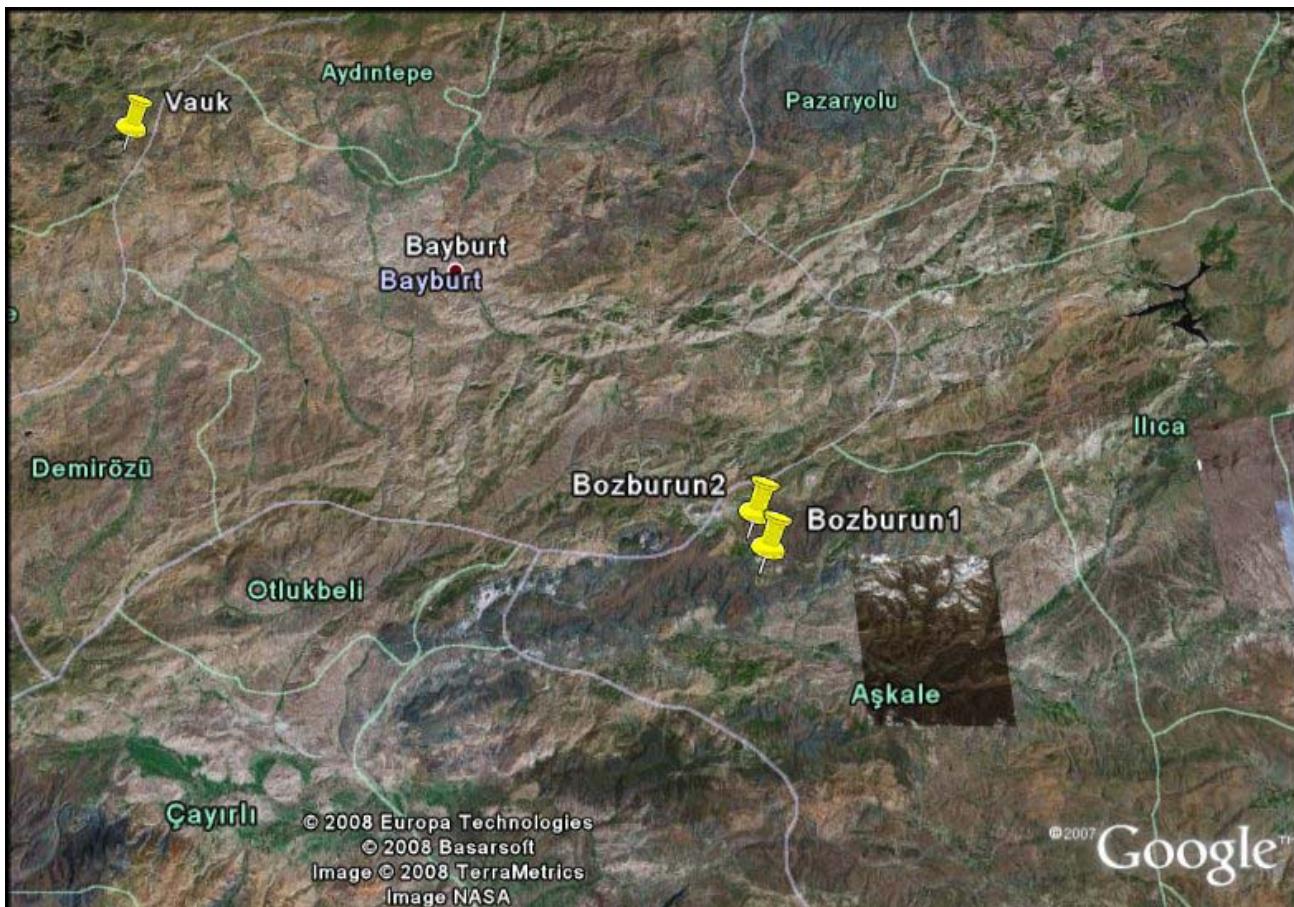


Fig.22- Copulation activity inside of a destructed *Paeonia* flower (Paeoniaceae). Erzurum Prov., Aşkale, Bozburun 2330m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.23- Monument of Kop Martyrs at Kop Dağı Pass, 2370m. Bayburt Prov., 23 June, 2008, photo M.Kemal (Cesa).

**Illustrations of some Lepidoptera found at Vauk Dağı Pass in the
Gümüşhane Province**



Map 3- Location of the Vauk Dağı Pass, 1850m (Gümüşhane Province), about 70km far from Bozburun2 in NW direction. [from Google Earth].



Fig.24- *Arctia villica* (Arctiidae) a male at rest by day among the grasses. Gümüşhane Prov., Vauk Dağı Pass, 1850m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.25- *Polyommatus (Neolysandra) diana* (Lycaenidae) a male at rest on the flower. Gümüşhane Prov., Vauk Dağı Pass, 1850m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.26- *Polyommatus (Neolysandra) diana* (Lycaenidae) a male at rest. Gümüşhane Prov., Vauk Dağı Pass, 1850m, 23 June, 2008, photo M.Kemal (Cesa).

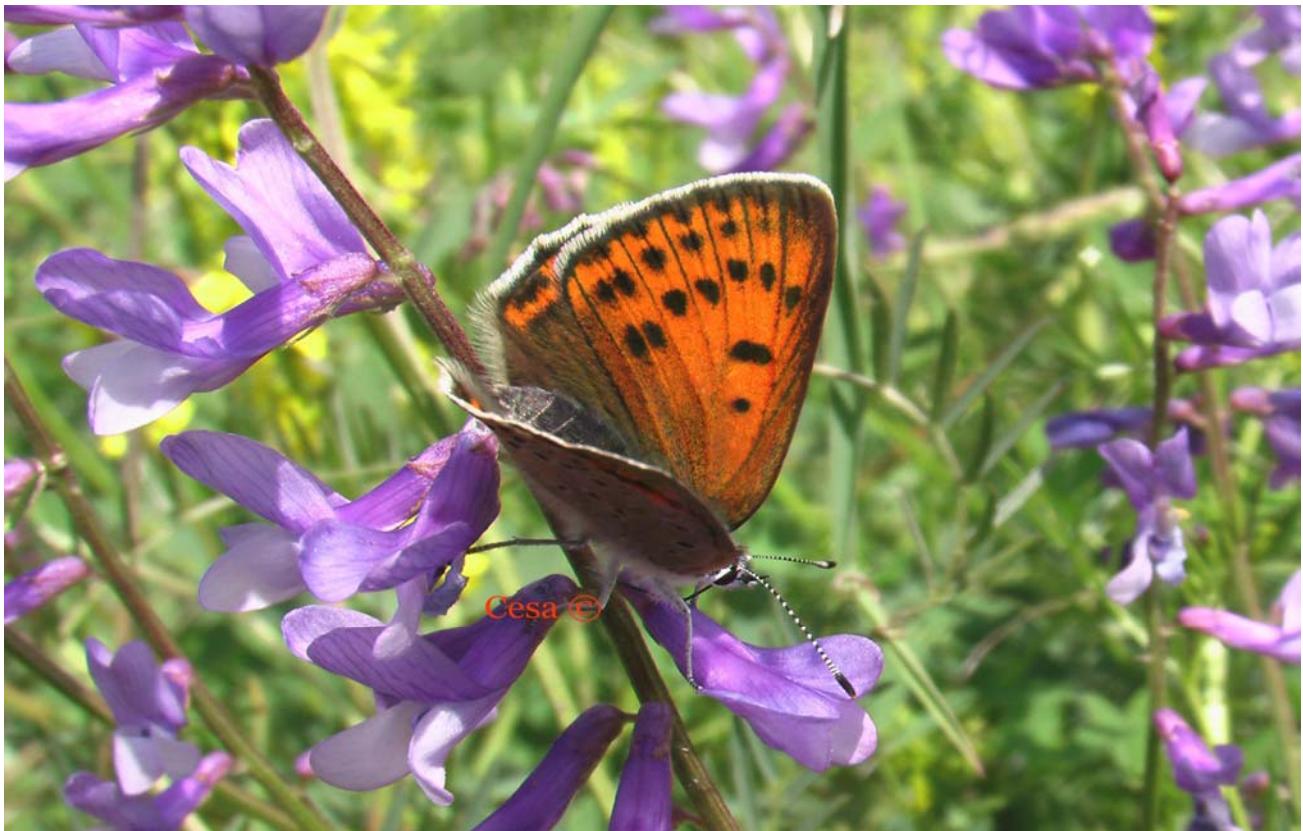


Fig.27- A feeding female of *Lycaena (Palaeochrysophanus) candens* ssp. *candens* (Lycaenidae). Gümüşhane Prov., Vauk Dağı Pass, 1850m, 23 June, 2008, photo M.Kemal (Cesa).

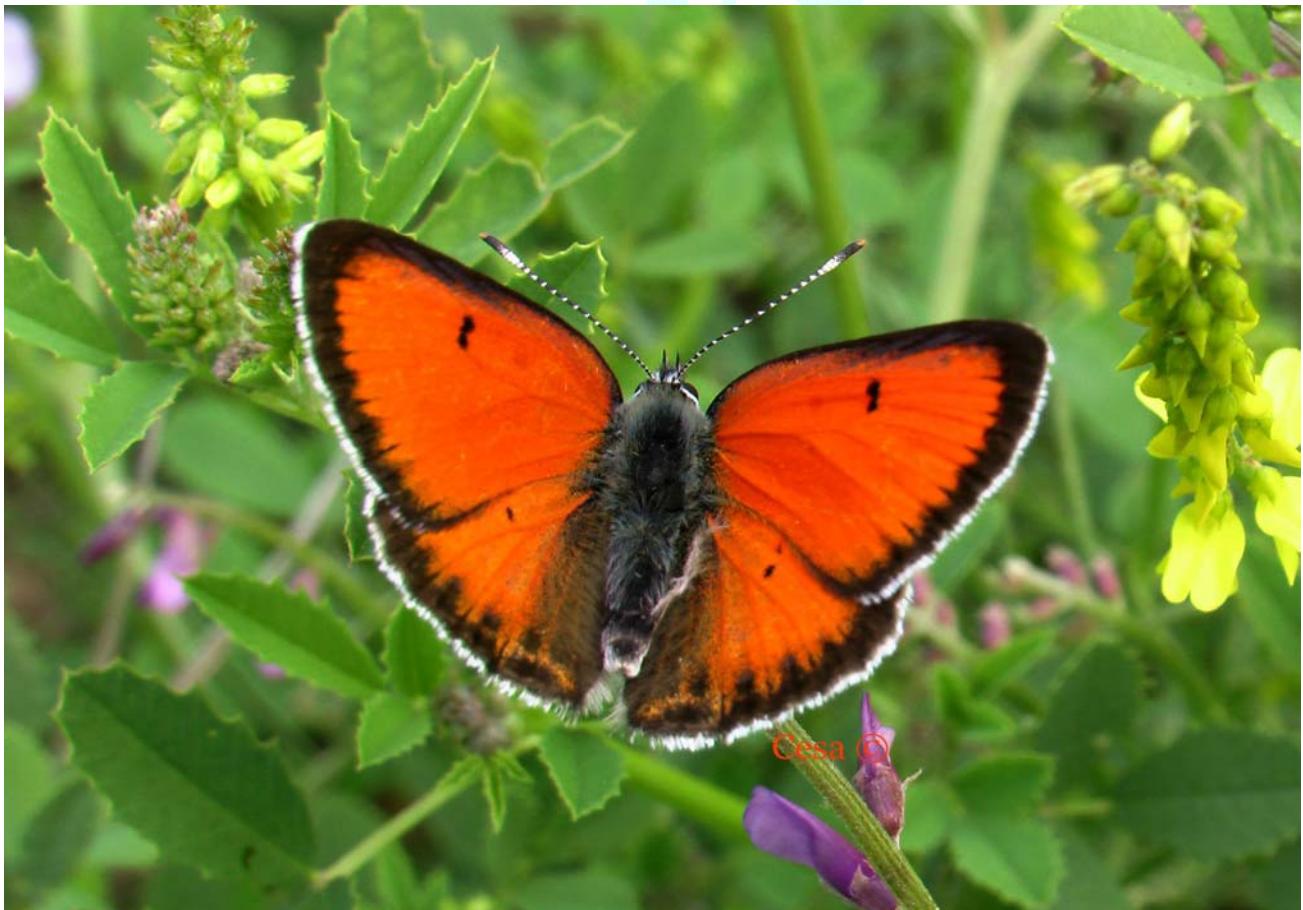


Fig.28- A feeding male of *Lycaena (Palaeochrysophanus) candens* ssp. *candens* (Lycaenidae). Gümüşhane Prov., Vauk Dağı Pass, 1850m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.29- A dilemma for a female between two lovers with the question: Which one is my true soul mate? *Eurodryas aurinia* (Argynnidae). Gümüşhane Prov., Vauk Dağı Pass, 1850m, 23 June, 2008, photo M.Kemal (Cesa).



Fig.30- Studying site at Vauk Pass, 1850m. Gümüşhane Province, 23 June, 2008, photo M.Kemal (Cesa).



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Fig.31— Some of the students of the Geology Department of the Karadeniz Teknik Üniversitesi in Trabzon, during an excursion in Gümüşhane Province, 23 June, 2008, photo M.Kemal (Cesa).





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